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CAREER OBJECTIVE

To continue my career in the field of Systems or Computer Engineering designing electronic hardware, working in the RF domain, or creating embedded software, preferably in aerospace.

EXPERIENCE

Senior Electrical Engineer *July 2013 - Present*

General Dynamics Mission Systems, Pittsfield MA

- Developed and executed evaluation and qualification tests for inherited hardware
- Performed integration and repair operations on legacy hardware
- Performed tasking at customer locations and pre-deployment locations
- Go-to person in the lab to diagnose and troubleshoot weird hardware and installation issues
- Performed software and systems testing on high-integrity mission-critical software

Test Engineer Co-op *January 2016 - May 2016*

Space Exploration Technologies, Hawthorne CA

- Designed and built hardware to test bias-T HD cameras
- Created software to automate the creation of trouble reports
- Developed tests to test flight avionics hardware
- Troubleshot issues with avionics test racks

PROJECTS

Radio-Internet Hotspot Transceiver (Multidisciplinary Senior Design)

- Worked as a team leader to complete self-appointed tasks
- Completed final PCB design, layout, assembly and test (It worked!)
- Device acted as an audio bridge between RF and the Allstar radio network
- Completed entire design process from customer requirements to prototyping and handoff.

Wideband Oxygen Sensor Controller

- Designed, built and programmed sensor controller that measured oxygen concentration
- Incorporated PID loops to keep a sensor at a constant temperature and oxygen concentration
- Could have been calibrated to measure accurate oxygen concentrations

Bluetooth Split Mechanical Keyboard (In Progress)

- Designed symmetrical split keyboard PCB to reduce PCB cost
- Keyboard PCB acts as mechanical plate to secure the keystwitches
- Each side of the keyboard has an identical circuit to use for the right or left
- Utilizes a Bluetooth capable microcontroller instead of a Bluetooth module
- Currently developing software, will include master/slave arbitration, USB connectivity

High Altitude Balloon Telemetry Tracker

- Personally developed hardware and software design and implementation
- Developed radio board to have the ability to use FSK, AFSK, or audio-based protocols
- Utilized multiple PCBs in order to separate functionality and increase reusability
- Can communicate GPS and other sensor data to the Amateur Radio APRS network

Assembly Language Pong Game

- Created a 1.5D Pong game for a school project in HCS12 assembly
- Required HCS12 assembly, PWM, ADC and digital output

Various Other Projects:

RIT Rocket Initiative power board	Racecar rollcage and endurance prep
Many input thermistor controller (in progress)	DSLR 12V battery eliminator (in progress)

AWARDS & SKILLS

Eagle Scout	A+ Certified

Languages & Software:

C	Python
Linux	ARM & HCS12 Assembly
Kicad PCB Design Software	DOORs Requirement Management
VHDL	Networking Equipment Configuration

EDUCATION

Bachelor of Science, Computer Engineering

Rochester Institute of Technology, Rochester NY, Graduated May 2017

Data Communication and Networks	Digital IC Design
Digital System Design	Cyborg Theory
Assembly Language Programming	HW & SW Design for Crypto Applications

PERSONAL INTERESTS AND HOBBIES

Working towards pilot licence	Camping and hiking
Amateur Radio Extra	Film photography
Motorcycle and automobile repair	Licked thing that was in space